

**CONNECTOR SYSTEM FOR A DOCKING STATION  
OF A PORTABLE COMPUTER SYSTEM**

by Michael D. Derocher and Jacques H. Helot

5

**ABSTRACT OF THE DISCLOSURE**

10 The present invention is embodied in a connector system for a docking  
station of a portable computer. The connector system includes a peripheral  
connector array that is removeably coupled, both mechanically and electrically, to a  
docking station or port replicator. Since the connector array is removeably coupled  
to the port replicator, the connector array can be maneuvered to allow easy and  
convenient connection of appropriate peripherals to the connector array. Also, the  
port replicator preferably has a recessed area for storing the connector array after  
15 electrical connection of appropriate peripherals to the connector array. This  
reduces clutter and tangling of the cables connected to the peripherals. In addition,  
the connector array can be of various sizes and shapes and can be designed to  
interface with specific portable computers. Further, the connector system of the  
present invention can be upgradeable in that the port replicator can accept  
20 upgraded or newer connector arrays that have additional or advanced connections  
for peripheral devices.